CLAIMS

1. A lipid compound comprising at least one non-polar moiety and a polar moiety, wherein each or at least one non-polar moiety is of the formula

X-Y-Z-

wherein X is a hydrocarbyl chain, Y is selected from at least one of S, Se, SO_2, SO, and O, and Z is an optional hydrocarbyl group,

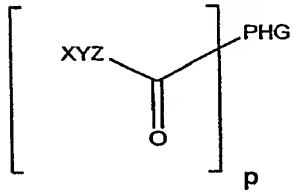
wherein the polar moiety is of the formula

$-[C(O)]_mPHG$

wherein PHG is a polar head group, and wherein m is the number of non-polar moieties.

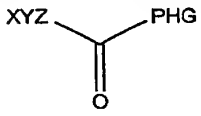
2. A compound according to claim 1 wherein each non-polar moiety is of the formula X-Y-Z- wherein X is a hydrocarbyl chain, Y is selected from at least one of S, Se, SO_2, SO, and O, and Z is an optional hydrocarbyl group,

3. A compound according to claim 1 wherein the compound is of the formula



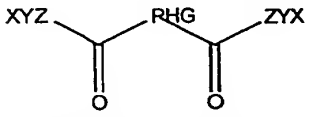
wherein p is from 1 to 10, preferably 1, 2 or 3, and wherein each X, Y and Z is selected independently of each other.

4. A compound according to claim 1 wherein the compound is of the formula



5. A compound according to claim 1 comprising at least two non-polar moieties wherein each is independently selected from non-polar moieties of the formula X-Y-Z-.

6. A compound according to claim 3 wherein the compound is of the formula



wherein each X, Y and Z is selected independently of each other.

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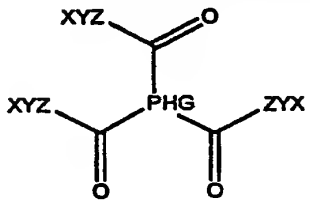
7. A compound according to claim 5 wherein the compound is of the formula



wherein each X, Y and Z is selected independently of each other.

8. A compound according to any one of the preceding claims wherein the polar head group is derived from one of phospholipids, ceramides, triacylglycerols, lysophospholipids, phosphatidylserines, glycerols, alcohols, alkoxy compounds, monoacylglycerols, gangliosides, sphingomyelins, cerebrosides, phosphatidylcholines, phosphatidylethanolamines, phosphatidylinositols (PI), diacylglycerols, Phosphatidic acids, glycerocarbohydrates, polyalcohols and phosphatidylglycerols.

9. A compound according to claim 8 wherein the polar head group is derived from a phospholipid.

10. A compound according to claim 9 wherein the phospholipid is a neutral or anionic phospholipid.

11. A compound according to claim 10 wherein the phospholipid is selected from phosphatidylcholine (PC) and phosphatidylethanolamine (PE).

12. A compound according to any one of the preceding claims wherein the polar head group (PHG) is of the formula -W-Linker-HG, wherein W is selected from CH_2, O, NR^1 and S, wherein R^1 is H or a hydrocarbyl group, wherein Linker is an optional linker group, and HG is a head group.

13. A compound according to any one of the preceding claims wherein X is a group selected from optionally substituted alkyl, optionally substituted alkenyl and optionally substituted alkynyl.

14. A compound according to any one of the preceding claims wherein X is a group selected from unsubstituted alkyl, unsubstituted alkenyl and unsubstituted alkynyl.

15. A compound according to any one of the preceding claims wherein X is a group selected from unsubstituted C_6-C_{24} alkyl, unsubstituted C_6-C_{24} alkenyl and unsubstituted C_6-C_{24} alkynyl.

16. A compound according to any one of the preceding claims wherein X is a group selected from unsubstituted C_{10}-C_{18} alkyl, unsubstituted C_{10}-C_{18} alkenyl and unsubstituted C_{10}-C_{18} alkynyl.

17. A compound according to any one of the preceding claims wherein X is a group selected from unsubstituted C_{14} alkyl, unsubstituted C_{14} alkenyl and unsubstituted C_{14} alkynyl.

18. A compound according to any one of the preceding claims wherein X is a hydrocarbon chain.

19. A compound according to any one of the preceding claims wherein Y is selected from S and Se.

20. A compound according to claim 19 wherein Y is S.

21. A compound according to any one of the preceding claims wherein Z is an alkyl group.

22. A compound according to any one of the preceding claims wherein Z is a C_1-C_{10}, preferably C_1-C_6, preferably C_1-C_3 alkyl group.

23. A compound according to any one of the preceding claims wherein Z is $-CH_2-$.

24. A compound according to any one of the preceding claims wherein Y-Z together represent the group

$[Y^1\text{-}CH_2]_n$

wherein Y^1 is selected from S, Se, SO_2, SO, O, CH_2, wherein when Y^1 is CH_2, the chain X-Y-Z contains an even number of atoms, and

wherein n is an integer from 1 to 20

25. A compound according to claim 24 wherein Y^1 is selected from S, Se, SO_2, SO, and O.

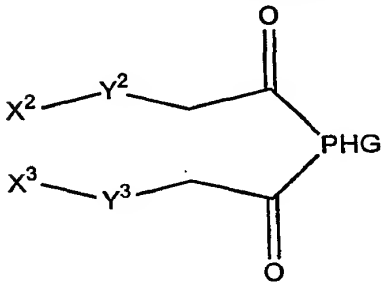
26. A compound according to claim 25 wherein Y^1 is selected from S and Se.

27. A compound according to claim 26 wherein Y^1 is S.

28. A compound according to any one of claims 24 to 26 wherein n is from 1 to 10, preferably from 1 to 5, preferably 1, 2 or 3.

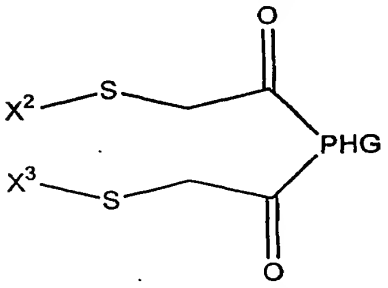
29. A compound according to any one of claims 24 to 27 wherein n is 1.

30. A compound according to claim 1 wherein the compound is of the formula



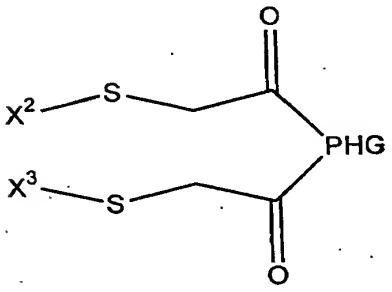
wherein Y^2 and Y^3 are independently S or Se, and X^2 and X^3 are independently selected from unsubstituted C_{10}-C_{18} alkyl, unsubstituted C_{10}-C_{18} alkenyl and unsubstituted C_{10}-C_{18} alkynyl.

31. A compound according to claim 1 wherein the compound is of the formula



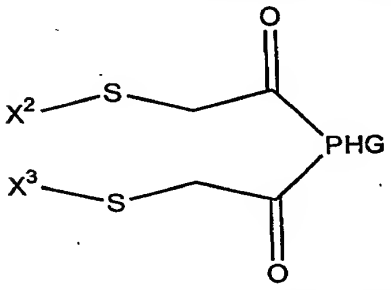
X^2 and X^3 are independently selected from unsubstituted C_{10}-C_{18} alkyl, unsubstituted C_{10}-C_{18} alkenyl and unsubstituted C_{10}-C_{18} alkynyl.

32. A compound according to claim 1 wherein the compound is of the formula



X^2 and X^3 are independently selected from unsubstituted C_{14} alkyl, unsubstituted C_{14} alkenyl and unsubstituted C_{14} alkynyl.

33. A compound according to claim 1 wherein the compound is of the formula

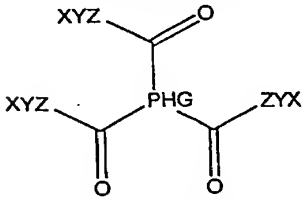


X^2 and X^3 are independently selected from $CH_3(CH_2)_{13}$-, $CH_3(CH_2)_6CH=CH(CH_2)_5$-, and $CH_3CH_2C\equiv C(CH_2)_{10}$-.

34. A compound according to claim 30, 31, 32 or 33 wherein the polar head group is derived from the polar head group of a phospholipid.

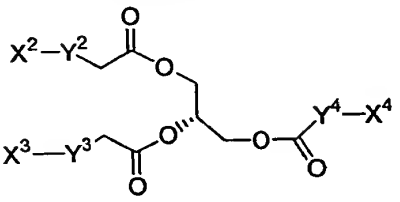
35 A compound according to claim 34 wherein the phospholipid is a phosphatidylcholine (PC) or a phosphatidylethanolamine (PE).

36. A compound according to claim 1 wherein the compound is of the formula



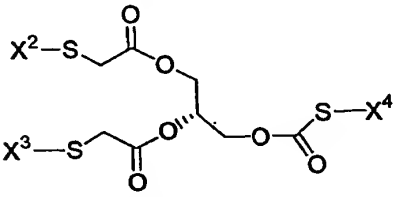
wherein each W, X, Y and Z is selected independently of each other.

37. A compound according to claim 36 wherein the compound is of the formula



wherein Y^2, Y^3 and Y^4 are independently S or Se, and X^2, X^3 and X^4 are independently selected from C_{10}-C_{18} alkyl, C_{10}-C_{18} alkenyl and C_{10}-C_{18} alkynyl.

38. A compound according to claim 36 wherein the compound is of the formula



wherein X^2, X^3 and X^4 are independently selected from C_{10}-C_{18} alkyl, C_{10}-C_{18} alkenyl and C_{10}-C_{18} alkynyl.

39. A combination comprising a liposome and a compound according to any one of claims 1 to 38.

40. A pharmaceutical composition comprising a compound according to any one of claims 1 to 38 or a combination according to claim 39 optionally admixed with a pharmaceutically acceptable carrier, diluent, excipient or adjuvant.

41. A topically administrable pharmaceutical composition according to claim 40.

42. A parenterally administrable pharmaceutical composition according to claim 40.

43. An intravenously administrable pharmaceutical composition according to claim 42.

44. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof, or a combination according to claim 39 in medicine.

45. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically

acceptable salt thereof in the manufacture of a medicament for the treatment and/or prevention of a condition selected from syndrome X, obesity, hypertension, fatty liver, diabetes, hyperglycaemia, hyperinsulinemia and stenosis.

46. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for lowering concentration of cholesterol and triglycerides in the blood of mammals and/or inhibiting the oxidative modification of low density lipoprotein.

47. A method for producing weigh loss or a reduction of the fat mass in a human or non-human animal in need thereof, comprising administering thereto an effective amount of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof.

48. A method for the modification of the fat distribution and content of animals, comprising administering thereto an effective amount of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof.

49. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the inhibition and/or prevention of the growth of tumours.

50. A method for the treatment and/or inhibition of primary and secondary metastatic neoplasms, comprising administering a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof.

51. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the prevention and/or treatment of proliferative skin disorders.

52. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the inhibition of proliferation and/or induction of differentiation of keratinocytes.

53. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the prevention and/or treatment of inflammatory disorders

54. A method for enhancing the endogenous production of interleukin-10 (IL-10) in mammalian cells or tissues, comprising administering a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof.

55. A method for suppression of the endogenous production of interleukin-2 (IL-2) in mammalian cells or tissues, comprising administering a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof.

56. Use of a compound according to any one of claims 1 to 38 or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for the inhibition of proliferation of stimulated peripheral mononuclear cells (PBMC).